RESPONSE UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q80181

Application No.: 10/791,669

## **REMARKS**

Claims 1-28 are all the claims pending in the application.

I. Response Rejection of Claims 1, 2, 9, 12, 15, 18, 21 and 24 under 35 U.S.C. § 103(a)

Claims 1, 2, 9, 12, 15, 18, 21 and 24 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Murray et al. (US 2001/0009119) in view of Denbigh et al.

Applicants respectfully traverse the rejection.

Claim 1 is directed to a method of manufacturing a magnetic particle, comprising: an alloy particle preparation step of preparing an alloy particle capable of forming a CuAu type or Cu<sub>3</sub>Au type hard magnetic ordered alloy phase; and a magnetic particle formation step. In the alloy preparation formation step, by using a mixing and reaction device which has a stirring vane rotating at a high speed in the interior of a mixer, a plurality of kinds of solutions for preparing said alloy particle are supplied to the interior of said mixer, where the plurality of kinds of solutions are mixed together and caused to react with each other by a liquid phase process, and at the same time the plurality of kinds of solutions are mixed together and caused to react with each other so that the peripheral speed in a leading end portion of said stirring vane is not less than 5 m/second. As a result of the claimed peripheral speed in a leading end portion of the stirring vane, it is possible to instantaneously and efficiently mix a plurality of kinds of solutions together and cause these solutions to react with each other.

Murray teaches a method of manufacturing a CuAu type magnetic particle comprising synthesizing magnetic Fe/Pt alloy nanoparticles. The Examiner recognizes that Murray does not disclose the use of the claimed mixing and reaction device. To make up for the deficiencies of Murray, Denbigh is cited as teaching that proper mixing of the reactants in a reactor is essential and that improper mixing can result in dead space, and the Examiner takes the position that

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one of ordinary skill in the art would have considered the invention obvious because Denbigh teaches that reactant mixing is a result-effective variable and the optimization of a result-effective variable such as mixing is obvious.

Applicants respectfully disagree.

Denbigh discloses a C.S.T.R. However, Denbigh does not mention anything about the speed of the stirring vane. More specifically, Denbigh is silent regarding the peripheral speed of the leading end of the stirring vane. Thus, Denbigh does not recognize the <u>speed</u> (more specifically, the peripheral speed) of the stirring vane as a result-effective variable.

Accordingly, it would not be obvious to one of ordinary skill in the art to use a mixing and reaction device where the peripheral speed in a leading end portion of said stirring vane is not less than 5 m/second. In addition, there is no rational reason why one of ordinary skill in the art would be motivated to arrive at Applicants' claimed peripheral speed in a leading end portion for the stirring vane.

Hence, for at least the above reasons, it is respectfully submitted that a *prima facie* case of obviousness has not been established.

Accordingly, withdrawal of the rejection is respectfully requested.

## II. Conclusion

In view of the above, reconsideration and allowance of claims 1-28 is respectfully requested.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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